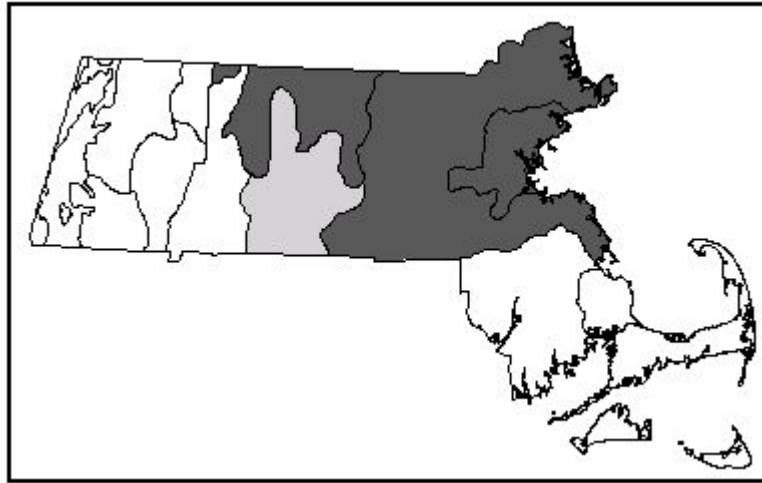


Community Name: BLACK ASH SWAMP
Community ELCODE: CP1A2A2000
SRANK: S2



Concept: A variant of red maple swamps in which black ash (*Fraxinus nigra*) is co-dominant in the canopy. Black ash swamps are associated with circumneutral groundwater seepage.

Environmental setting: Black ash swamps typically occur in areas with circumneutral groundwater seepage. They can occur at the edge of river floodplains adjacent to the upland slope where seepage input occurs, as small seepy pockets within a larger matrix of red maple swamp, or at the headwaters of streams, which may be the typical location in northern and western parts of the state. The pH of black ash swamps in Essex Co. ranges between 7.0 and 7.4 [MacDougall, pers. comm.]. More information is needed on the physical characteristics of black ash seepage swamps.

Vegetation Description: Black ash (*Fraxinus nigra*) is co-dominant with red maple (*Acer rubrum*) in the overstory. There are lesser amounts of sugar maple (*Acer saccharum*), Eastern hemlock (*Tsuga canadensis*), yellow birch (*Betula alleghaniensis*), and white pine (*Pinus strobus*). Ironwood (*Carpinus caroliniana*) is common in the sub-canopy, but it does not always occur. Common shrubs are spicebush (*Lindera benzoin*), winterberry (*Ilex verticillata*), highbush blueberry (*Vaccinium corymbosum*), mountain holly (*Nemopanthis mucronatus*), northern arrow-wood (*Viburnum dentatum* var. *lucidum*), and occasional witch hazel (*Hamamelis virginiana*). Skunk cabbage (*Symplocarpus foetidus*) and cinnamon fern (*Osmunda cinnamomea*) are common herb species. Other herbaceous associates include sensitive fern (*Onoclea sensibilis*), royal fern (*Osmunda regalis*), lady fern (*Athyrium filix-femina*), jack-in-the-pulpit (*Arisaema triphyllum*), tussock sedge (*Carex stricta*), swamp-saxifrage (*Saxifraga pensylvanica*), and jewelweed (*Impatiens capensis*). The micro-topography is hummock and hollow with abundant Sphagnum spp. moss, particularly on the hummocks. Black ash swamps occurring in Berkshire Co. or the Connecticut Valley that have species-rich herbaceous layers, with more than 40 species, and calcareous indicator species including delicate sedge (*Carex leptalea*), brome-like sedge (*Carex bromoides*), long-stalked sedge (*Carex pedunculata*), rough-leaved goldenrod (*Solidago patula*), and golden ragwort (*Senecio aureus*) are classified separately as "black ash-red maple-tamarack calcareous seepage swamps."

Associations: No associations have been described in Massachusetts.

Habitat values for Associated Fauna: Black ash swamps can function as vernal pool habitat if water remains standing for 2-3 months and they lack fish; these areas provide important amphibian breeding habitat.

Associated rare plants:

NONE KNOWN

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Associated rare animals:

CLEMMYS GUTTATA	SPOTTED TURTLE	SC
CLEMMYS INSCULPTA	WOOD TURTLE	SC
EMYDOIDEA BLANDINGII	BLANDING'S TURTLE	T
PAPAPEMA SP 2	OSTRICH FERN BORER MOTH	SC

**Examples with
Public Access:**

Cedar Swamp, Reading; Satan's Kingdom WMA, Northfield.

Threats:

Known threats include alteration of natural seepage and logging. More information is needed to determine the greatest threats to black ash seepage swamps.

Management needs:

More information is needed to assess the management needs of black ash seepage swamps.

Synonyms

USNVC/TNC:

Fraxinus nigra-Acer rubrum/Nemopanthus mucronatus-Vaccinium corymbosum forest [CEGL006220].

MA [old name]:

Southern New England acidic seepage swamp, black ash swamp [CP3B2A1C00].

ME:

Not described.

VT:

Red maple-black ash swamp.

NH:

Calcareous/circumneutral hardwood seepage swamp.

NY:

Not described.

CT:

Not described.

RI:

Not described.

Golet & Larson, 1974:

Deciduous wooded swamp (WS-1).

Other:

Author:

J. Kearsley

Date:

7/21/99